

AMENDMENTS TO THE CLAIMS

Please add claims 3-13 and amend claims 1 and 2 as follows:

1. (Currently Amended) A method of manufacturing porous glass base material for optical fiber, comprising: including that

flame-hydrolyzing raw materials for glass in an oxyhydrogen flame to generate glass fine particles;[[,]]

using a burner to deposit ~~depositing~~ the generated glass fine particles on a rotating target to form said porous glass base material, said burner being moved relatively to said rotating target;

adjusting an amount of hydrogen and oxygen supplied to said burner during said using ~~using~~ said burner such that a temperature difference (Ta-Tb) between a surface temperature of said porous glass base material when touching a flame of said burner (Ta) and a surface temperature of said porous glass base material prior to touching said flame of said burner (Tb) is within a range from 200 °C to 700 °C; and

dehydrating and sintering ~~said~~ porous glass base material to transform said porous glass base material into clear glass, ~~wherein in terms of the surface temperature of said porous glass base material, which changes as the burner used for depositing glass fine particle is moved relatively to said target, the temperature difference between the surface temperature of said porous glass base material touching said burner flame Ta and the surface temperature of the porous glass base material before touching the flame Tb, that is Ta-Tb, is adjusted to be within the range from 200 to 700 degrees centigrade.~~

2. (Currently Amended) A [[Glass]] glass base material for optical fiber made of the porous glass base material obtained according to claim 1, wherein said porous glass base material is dehydrated, sintered, and transformed into clear glass.

3. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said rotating target is displaced relative to said burner being moved.

4. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said burner comprises a concentric multi tube burner.

5. (New) The method of manufacturing porous glass base material for optical fiber according to claim 4, wherein said concentric multi tube burner comprises:

- a first tube comprising SiCl_4 and O_2 ;
- a second tube comprising air;
- a third tube comprising H_2 ;
- a fourth tube comprising N_2 ; and
- a fifth tube comprising O_2 .

6. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said glass fine particles are deposited at a rate in a range of 2040 g/hr to 2360 g/hr.

7. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein the temperature difference ($\text{T}_a - \text{T}_b$) is within a range from 200 °C to 400 °C.

8. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein the temperature difference (Ta-Tb) is within a range from 500 °C to 700 °C.

9. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein a deposition efficiency was in a range of 0.51 to 0.59.

10. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said glass fine particles are deposited at a rate in a range of 2040 g/hr to 2160 g/hr.

11. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said glass fine particles are deposited at a rate in a range of 2200 g/hr to 2360 g/hr.

12. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein a deposition efficiency was in a range of 0.51 to 0.54.

13. (New) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein a deposition efficiency was in a range of 0.55 to 0.59.